

WHAT IS CLAIMED AS NEW AND DESIRED TO BE SECURED BY LETTERS
PATENT OF THE UNITED STATES IS:

1. A method for communicating between a monitored device and a monitoring device, comprising the steps of:

5 determining information to be transmitted by the monitored device, the information to be transmitted including information from sensors in the monitored device;

10 determining a mode of communication between the monitored and the monitoring device by determining if the information to be transmitted is to be transmitted using one of a connection-mode and a connectionless-mode of communication;

15 transmitting the information by a connection-mode of communication from the monitored device to the monitoring device, when the step of determining the mode of communication has determined that a connection-mode of communication is to be used; and

20 transmitting the information by a connectionless-mode of communication from the monitored device to the monitoring device, when the step of determining the mode of communication has determined that a connectionless-mode of communication is to be used.

2. A method according to claim 1, wherein the step of transmitting the information by the connectionless-mode of communication comprises:

25 transmitting the information as an Internet electronic mail message over the Internet.

3. A method according to claim 1, wherein the step of transmitting the information by the connection-mode of communication comprises:

transmitting the information using one of a telephone line and an ISDN line.

4. A method according to claim 1, wherein the step of transmitting a message from the monitored device comprises: transmitting a message from a business office device.

5. A method according to claim 4, wherein the step of transmitting a message from a business office device comprises:

transmitting a message from one of a copier, a facsimile machine, and a printer.

6. A method according to claim 1, further comprising, performed before the determining or transmitting steps, the step of:

registering address information of the monitoring device so that connection-mode and connectionless-mode communications can be sent to the monitoring device by the monitored device.

7. A method according to claim 1, further comprising the step of:

encrypting the information to be transmitted when the step of determining the mode of communication has determined that a connectionless-mode of communication is to be used.

8. A method according to claim 1, further comprising the step of:

receiving the connectionless-mode communication by the monitoring device through a firewall.

9. A method according to claim 1, further comprising the steps of:

5 storing the transmitted information in a data base; and
sharing information in the data base between more than one department in a company.

10. A method for communicating between a monitored device and a monitoring device, comprising the steps of:

10 determining information to be transmitted by the monitoring device to the monitored device, the information including a request for a status of the monitored device determined using sensors within the monitored device; and

15 transmitting the information by a connectionless-mode of communication from the monitoring device to the monitored device.

11. A method according to claim 10, wherein the step of transmitting the information by the connectionless-mode of communication comprises:

20 transmitting the information as an Internet electronic mail message over the Internet.

12. A method according to claim 10, wherein the step of transmitting a message from the monitoring device comprises:

25 transmitting a message to the monitored device which is a business office device.

13. A method according to claim 12, wherein the step of transmitting a message to the business office device comprises:

transmitting a message to one of a copier, a facsimile machine, and a printer.

14. A method according to claim 10, further comprising the steps of:

receiving the transmitted information by the monitored device; and

transmitting a connectionless-mode communication from the monitored device to the monitoring device containing status information of the monitored device, in response to the transmitted information from the monitoring device.

15. A method according to claim 10, wherein the transmitting step comprises:

transmitting the information from the monitoring device to a plurality of monitored devices including the monitored device.

16. A method for communicating between a machine and a monitoring device, comprising the steps of:

determining status information using at least one of a mechanical and electrical sensor; and

transmitting a connectionless-mode message from the machine to the monitoring device containing the status information.

17. A method according to claim 16, further comprising the step of:

analyzing the status information by the machine,
wherein the status information is transmitted using the
connectionless-mode message when the status information is
analyzed and determined to be within a standard operating
range.

18. A method according to claim 17, further comprising
the steps of:

determining status information which is outside of normal
operating parameters exists in the machine using at least one
of the mechanical and electrical sensor; and

transmitting a connection-mode message from the machine
to the monitoring device containing the status information
which is outside of the normal operating parameters.

19. A method according to claim 17, wherein the step of
transmitting between the business office machine and the
monitoring device comprises:

transmitting an Internet electronic mail message between
a device selected from the group consisting of a copier, a
facsimile machine, and a printer, and the monitoring device.

20. A method for communicating between a machine and a
monitoring device comprising the steps of:

receiving a connectionless-mode message from the
monitoring device by the machine;

analyzing the message by the machine; and

performing an action by the machine in response to the
message, after the message is analyzed.

21. A method according to claim 20, wherein the analyzing step includes:

parsing the message; and

determining an action which the message requests to be taken.

22. A method according to claim 21, wherein the step of performing an action comprises:

transmitting a response message from the machine to the monitoring device in response to the message.

23. A method according to claim 22, wherein the step of transmitting comprises:

transmitting the response message which contains information of the machine including information obtained from sensors, when the received connectionless-mode message requests a value to be returned.

24. A method according to claim 23, wherein the step of transmitting comprises:

transmitting the response message which is a connectionless-mode message.

25. A method according to claim 20, wherein the receiving step comprises:

receiving the connectionless mode message which is an internet electronic mail message.

26. A computer program product having a computer readable medium having computer program logic recorded thereon for implementing communication between two devices, comprising:

means for determining information to be transmitted by a first device;

means for determining a mode of communication between the first and a second device by determining if the information to be transmitted is to be transmitted using one of a connection-mode and a connectionless-mode of communication;

means for transmitting the information by a connection-mode of communication from the first device to the second device, when the means for determining the mode of communication has determined that a connection-mode of communication is to be used; and

means for transmitting the information by a connectionless-mode of communication from the first device to a second device, when the means for determining the mode of communication has determined that a connectionless-mode of communication is to be used.

27. A system for communicating between a monitored device and a monitoring device, comprising:

sensors within the monitored device which sense information to be transmitted to the monitoring device;

means for determining a mode of communication between the monitored and the monitoring device by determining if the information to be transmitted is to be transmitted using one of a connection-mode and a connectionless-mode of communication;

a connection-mode transmitter which transmits the information by a connection-mode of communication from the

monitored device to the monitoring device, when the means for determining the mode of communication has determined that a connection-mode of communication is to be used; and

5 a connectionless-mode transmitter which transmits the information by a connectionless-mode of communication from the monitored device to the monitoring device, when the means for determining the mode of communication has determined that a connectionless-mode of communication is to be used.

28. A system according to claim 27, wherein the connectionless-mode transmitter comprises:

a transmitter which transmits the information as an Internet electronic mail message over the Internet.

29. A system according to claim 27, wherein the connection-mode transmitter comprises:

15 a transmitter which transmits the information using one of a telephone line and an ISDN line.

30. A system according to claim 27, wherein the monitored device is a business office device.

20 31. A system according to claim 30, wherein the business office device is one of a copier, a facsimile machine, and a printer.

32. A system according to claim 27, further comprising:
means for registering address information of the monitoring device so that connection-mode and connectionless-
25 mode communications can be sent to the monitoring device by the monitored device.

33. A system according to claim 27, further comprising:

means for encrypting the information to be transmitted when the means for determining the mode of communication has determined that a connectionless-mode of communication is to be used.

5 34. A system according to claim 27, further comprising:
a firewall, connected to monitoring device, through which connection-mode communications from the monitored device pass.

10 35. A system according to claim 27, further comprising:
a data base which stores the transmitted information; and
means for sharing information in the data base between more than one department in a company.

15 36. A system for communicating between a monitored device and a monitoring device, comprising:
means for determining information to be transmitted by the monitoring device to the monitored device, the information including a request for a status of the monitored device determined using sensors within the monitored device; and
a connectionless-mode transmitter which transmits the information by a connectionless-mode of communication from the
20 monitoring device to the monitored device.

 37. A system according to claim 36, wherein the connectionless-mode transmitter comprises:

a transmitter which transmits the information as an Internet electronic mail message over the Internet.

25 38. A system according to claim 36, wherein the monitoring device is a business office device.

39. A system according to claim 38, wherein the business office device is one of a copier, a facsimile machine, and a printer.

40. A system according to claim 36, wherein the monitored device further comprises:

a receiver which receives the transmitted information; and

a transmitter which transmits a connectionless-mode communication from the monitored device to the monitoring device containing status information of the monitored device, in response to the transmitted information from the monitoring device.

41. A system according to claim 36, wherein the connectionless-mode transmitter comprises:

a transmitter which transmits the information from the monitoring device to a plurality of monitored devices including the monitored device.

42. A system for communicating between a machine and a monitoring device, comprising:

sensors within the machine which senses status information to be transmitted to the monitoring device; and

a connectionless-mode transmitter which transmits the status information by a connectionless-mode of communication from the machine to the monitoring device.

43. A system according to claim 42, further comprising: means for analyzing the status information by the machine,

wherein the status information is transmitted using the connectionless-mode transmitter when the status information is analyzed and determined to be within a standard operating range.

5 44. A system according to claim 43, further comprising:
means for determining status information which is outside of normal operating parameters exists in the machine using said sensors; and

transmitting a connection-mode message from the machine to the monitoring device containing the status information which is outside of the normal operating parameters.

45. A system according to claim 43, wherein the connectionless-mode transmitter comprises:

15 a transmitter which transmits the information as an Internet electronic mail message over the Internet.

46. A system for communicating between a machine and a monitoring device comprising:

a receiver within the monitored device which receives a connectionless-mode message from the monitoring device;

20 means for analyzing the message by the machine; and

means for performing an action by the machine in response to the message, after the message is analyzed.

47. A system according to claim 46, wherein the analyzing means includes:

25 a parser which parses the message; and

means for determining an action which the message requests to be taken.

48. A system according to claim 47, wherein the means for performing an action comprises:

a transmitter which transmits a response message from the machine to the monitoring device in response to the message.

5 49. A system according to claim 48, wherein the transmitter comprises:

10 a transmitter which transmits the response message which contains information of the machine including information obtained from sensors, when the received connectionless-mode message requests a value to be returned.

50. A system according to claim 49, wherein the transmitter is a connectionless-mode transmitter.

51. A system according to claim 46, wherein the receiver is an Internet electronic mail receiver.